COUNTY OF MONTEREY
HEALTH DEPARTMENT
Elsa Jimenez, Director of Health

Administration
Behavioral Health
Clinic Services
Emergency Medical Services
Environmental Health/Animal Services
Public Health
Public Administrator/Public Guardian

May 19, 2017

Pacific Valley School
Attn: Gordon Piffero
69325 HWY 1
BIG SUR, CA 93920

COMPLIANCE ORDER LETTER
Pacific Valley School Water System, I. D. No. 270-2254

Coliform Bacteria MCL Violations for **May 2017**
Non-Transient Non-Community Water System

Dear Mr. Piffero,

This letter is formal notification that the above referenced water system is in violation of Title 22 of the California Code of Regulations (CCR) drinking water standards. Specifically, the Monterey County Health Department, Environmental Health Bureau (EHB) has received bacteriological monitoring results which indicate this water system is in violation of the Total Coliform Maximum Contaminant Level (MCL) set forth in Section 64426.1(b)(2), Title 22, CCR for the months of January and February 2016. The MCL was exceeded since two or more samples were total coliform positive in the same month.

As required by Section 64423.1(b), Title 22, CCR, the water system shall direct the laboratory to notify the system within 24 hours whenever the presence of total coliforms, fecal coliforms or E. coli is demonstrated in a sample and the water system shall ensure that a contact person is available to receive these analytical results 24-hours a day. Section 64423.1(c), Title 22, CCR requires that if a water system is not in compliance with the Total Coliform MCL, the system shall notify the Department by the end of the business day on which this is determined, unless the determination occurs after the Department office is closed, in which case the supplier shall notify the Department within 24 hours of the determination. EHB **was** properly notified of the MCL violation.

As required by Section 64426(b)(2), Title 22,CCR, the water system shall submit information on the current status of physical works and operating procedures which may have caused the water quality failure. A Positive Total Coliform Investigation form has been attached to report your findings. Complete the form and submit a copy to EHB by **June 10, 2017.**

In order to bring the system back into compliance with coliform bacteria water quality standards in Section 64421, Title, 22 CCR, you are hereby ordered to take all necessary actions to resolve the coliform contamination event. This includes disinfecting the system and correcting any deficiencies noted in the Positive Total Coliform Investigation form. **After the disinfection process is complete and any necessary repairs have been completed, collect additional samples in order to help determine if the coliform contamination has been resolved. In order to show all chlorine has been flushed from the system, chlorine residuals shall be**

analyzed and reported with each sample. A normally chlorinated system shall also analyze and submit chlorine residuals to show chlorine levels have returned to normal. This process shall be repeated until one complete set of samples is absent of coliform bacteria. Additionally, Section 64424, Title 22, California Code of Regulations, requires that if one or more samples collected in a month is positive for total coliform bacteria, the water system shall collect at least five routine samples the following month. Therefore, **five routine samples shall be collected during June 2017.** Your system may be eligible for a waiver of the 5 follow-up samples based on the results of the samples collected after the disinfection process and the Coliform Investigation form. This waiver request must be submitted to EHB for review and approval prior to the end of the month in which follow-up samples are required.

You must also comply with all other sampling requirements, reporting, and notification requirements applicable to your system. Please see the attached monitoring guidelines and following website for assistance in determining sampling and reporting requirements. http://www.cdph.ca.gov/certlic/drinkingwater/Documents/Lawbook/dwregulations-12-21-2010.pdf

As per section 64463.4(a)(1), Title 22, CCR, in order to inform users of the quality of the water, the water supplier is required to notify all persons served by the water system of the MCL violation. The notification requirement can be met by conspicuously posting an approved notice for non-resident water users, and by hand delivering or mailing a copy of the notice to residents served by the water system. A sample notification has been enclosed for your convenience. Please complete the notification process and submit a copy of the notification and proof of notification forms to the EHB by **June 10, 2017.** The notification is to remain in effect until the problem has been resolved and the EHB has given clearance.

Please note that any further MCL violations or failure to comply with sampling, reporting, and notification requirements could result in additional enforcement action against the water system, which may be billed at the EHBs' current hourly rate. If you have any questions, please contact me, Sandy Ayala at (831)755-8924 or ayalasa@co.monterey.ca.us

Sincerely,

Sandy Ayala

Sandy Ayala REHS III
Senior Environmental Health Specialist

encl: Bacteriological monitoring guidelines, Public Notification, Proof of Notification, Positive Total Coliform Investigation

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

Pacific Valley School Water System
Has Levels of Coliform Bacteria
Above the Drinking Water Standard

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what you should do, what happened, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. We took _____ samples to test for the presence of coliform bacteria during _____[month year]. _____ of those samples showed the presence of total coliform bacteria. The standard is that no more than 1 sample per month/may do so.

What should I do?

- **You do not need to boil your water or take other corrective actions.**
- This is not an emergency. If it had been, you would have been notified immediately. Total coliform bacteria are generally not harmful themselves. *Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.*
- Usually, coliforms are a sign that there could be a problem with the treatment or distribution system (pipes). Whenever we detect coliform bacteria in any sample, we do follow-up testing to see if other bacteria of greater concern, such as fecal coliform or *E. coli*, are present. **We did not find any of these bacteria in our subsequent testing.** If we had, we would have notified you immediately. However, we are still finding coliforms in the drinking water.
- People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from U.S. EPA's Safe Drinking Water Hotline at 1(800) 426-4791.
- If you have other health issues concerning the consumption of this water, you may wish to consult your doctor.

What happened? What is being done?

_____[Describe corrective action]. We will inform you when our sampling shows that no bacteria are present. We anticipate resolving the problem within [estimated time frame].

1270 Natividad Road, Salinas, CA 93906 PHONE (831) 755-4507 FAX (831) 755-8929
http://www.mtyhd.org/

For more information, please contact _____[name of contact] at _____[phone number] or_____ [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

Secondary Notification Requirements

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- SCHOOLS: Must notify school employees, students, and parents (if the students are minors).
- RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities): Must notify tenants.
- BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS: Must notify employees of businesses located on the property.

This notice is being sent to you by Pacific Valley School Water System.

State Water System ID#: 270-2254. Date distributed: _____.

PROOF OF NOTIFICATION

As required by Section 116450 of the California Health and Safety Code (H&SC), I notified all users of water supplied by the

Pacific Valley School Water System

of failure to comply with the maximum contaminant level for coliform bacteria for the month of May 2017 according to California Code of Regulations(CCR), Title 22, Section 64426.1.

Notification was performed on _____
(Date)

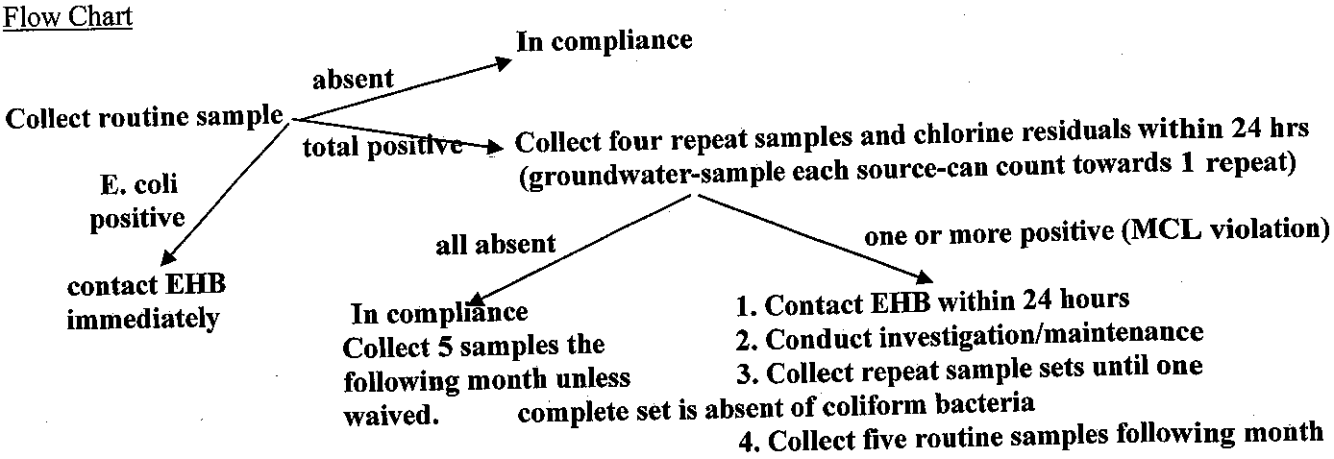
by:_____.
(method of distribution)

_____
Signature and Title of Water System Representative

Disclosure: Be advised that Sections 116725 and 116730 of the H&SC state that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the California Safe Drinking Water Act may be liable for a civil penalty not to exceed five thousand dollars ($5,000) for separate violation for each day that violation continues. In addition, the violators may be prosecuted in criminal court and upon conviction, be punished by a fine of not more than $25,000 for each day of violation, or be imprisoned in the county jail not to exceed one year, or both the fine and imprisonment.

Monterey County Health Department, Environmental Health Bureau
Bacteriological Monitoring Requirements

Flow Chart



DETAILS (See Title 22, California Code of Regulations)

Sampling Frequency-Routine Samples (section 64423)
Community and Nontransient-Noncommunity water system - minimum of one sample per month
Transient-Noncommunity water system – groundwater-minimum of one sample per quarter, except one sample per month in which 1,000 or more persons can be served by the water system
Transient-Noncommunity water system – surface water-minimum of one sample per month
If any samples are E.coli positive, the water system must notify EHB immediately.

Repeat Sampling Requirements – Required when Routine Sample is total coliform positive
The water system must require the laboratory to notify the system within 24 hours whenever any coliforms are present in a sample. A repeat sample set must be collected by the system within 24 hours of notification. This set must consist of at least four samples for each total coliform-positive sample and be collected in accordance with an approved sample siting plan. Generally, repeat samples shall be collected from:

- the site of the original positive (required),
- the well,
- the storage tank(s),
- another point in the distribution system within 5 service connections of the original positive
- Goundwater systems must sample each source-sample may count towards 1 repeat sample
- If well is E. coli/fecal positive, contact EHB within 24 hrs for New Groundwater rule guidance

This collection scheme is designed to identify the origin of the contamination. Systems with multiple wells and tanks may sample within 5 service connections upstream and downstream of the original positive or from combined well and tank taps, if available.

The samples shall be collected prior to disinfection of the water system and the water system shall be inspected by the water system during the sampling to identify any potential causes of the original positive sample. Chlorine residual readings shall be analyzed and reported for all repeat samples.

Maximum Contaminant Level Exceedence (MCL) (64426.1)
If one or more samples in the repeat sample set are total coliform-positive, the water system has exceeded the MCL for coliform bacteria and must notify this office within 24 hours. The system must investigate the cause of the positive samples and continue to collect a set of repeat samples until one set has no coliform positive samples. The system must also submit a report of findings including the following (64426):

- Current operating procedures that are or could potentially be related to the increase in bacterial count, such as main repairs or well work conducted without disinfection,
- System pressure loss to less than 5 psi,
- Potential cross connections,
- Physical evidence indicating bacteriological contamination of facilities (such as openings in the well casing, storage tank or evidence of animal activity in the vicinity of the well),
- Analytical results of any additional investigative samples collected, including well samples,
- residents' illness suspected of being waterborne.
- Records of the investigation and any action taken.

Follow-up Sampling
The water system must collect five routine samples the month following any total coliform sample (64424). May be waived if the Department conducts a site visit and determines why the sample(s) were positive and established that the problem has been corrected.

Additional Sampling Requirements
Samples for bacteriological testing must also be collected whenever either of the following conditions apply:
- loss of water pressure below 5 psig within the distribution system
- upon completion of construction, installation, or repair of wells, water mains, or storage facilities.

Samples are to be collected in accordance with an approved Sample Siting Plan (SSP). The sample must be tested by a laboratory certified by the State of California. The water system must direct the laboratory to submit copies of all required bacteriological monitoring directly to this office by the tenth day of the following month.

Collecting Bacteriological Water Samples

Collect samples at cold water faucets that are free of contaminating devices such as screens, aeration devices, hoses, point-of-use devices, or swiveled faucets. To prevent contamination, do not obtain samples from taps that leak around the valve stem and allow water to flow over the outside of the tap. Faucets must be high enough to put the bottle underneath without contacting the mouth of the container with the faucet.

Taking the sample:
1. Open the faucet and thoroughly flush the line for at least two to five minutes. The longer the water runs the better the chance of flushing out bacteria that may be in the building plumbing.
2. Reduce the flow until the water leaving the tap has a continuous, gentle flow without any turbulence.
3. Sterile containers provided by your laboratory must be used. Do not rinse the bottle prior to taking the sample. The powder in the bottle is sodium thiosulfate which inactivates any chlorine-based disinfectant. Be sure this substance stays in the bottle.
4. Remove the cap from the sample bottle and keep it in your hand facing down. Do not touch the inside of the cap or the bottle's inner surface as these actions can contaminate the sample.
5. Carefully place the sample bottle under the running water. Fill the bottle just to the fill-line; do not overfill the sample bottle or allow the water to splash.
6. Quickly replace the cap on the bottle and label the sample clearly. If samples cannot be delivered to the lab immediately, place samples in a cooler with cold packs. If ice is used, at no time should the sample container be immersed or submerged in the ice or melted ice water. The sample must be delivered to the laboratory within 24 hours from the time of collection.

POSITIVE TOTAL COLIFORM INVESTIGATION

This form is intended to assist public water systems in completing the investigation required by the California Department of Public Health (Section 64426(b) of Title 22, California Code of Regulations) and may be modified to take into account conditions unique to the system.

ADMINISTRATIVE INFORMATION

PWS Name:		PWSID NUMBER:	
	Name	**Address**	**Telephone #**
Operator in Responsible Charge (ORC)			
Person that collected TC samples if different than ORC			
Owner			
Certified Laboratory for Microbiological Analyses			
Date Investigation Completed:			
Month(s) of Total Coliform MCL Failure:			

INVESTIGATION DETAILS

SOURCE	WELL (name)	WELL (name)	WELL (name)	WELL (name)	COMMENTS
1. Inspect each well head for physical defects and report					
a. Is raw water sample tap upstream from point of disinfection?					
b. Is wellhead vent pipe screened?					
c. Is wellhead seal watertight?					
d. Is well head located in pit or is any piping from the wellhead submerged?					
e. Does the ground surface slope towards well head?					
f. Is there evidence of standing water near the wellhead?					
g. Are there any connections to the raw water piping that could					

SOURCE	WELL (name)	WELL (name)	WELL (name)	WELL (name)	COMMENTS
be cross connections? (describe all connections in comments)					
h. Is the wellhead secured to prevent unauthorized access?					
i. Does the well have a non-leaking check valve/foot valve to prevent water from draining back into the well from the distribution system?					
j. To what treatment plant (name) does this well pump?					
k. How often do you take a raw water total coliform (TC) test?					
l. Provide the date and result of the last TC test at this location					

TREATMENT	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	COMMENTS
1. If you provide treatment, what type and was there any equipment failure?					

STORAGE	TANK (name)	TANK (name)	TANK (name)	TANK (name)	COMMENTS
1. Is each tank locked to prevent unauthorized access?					
2. Are all vents of each tank screened down-turned to prevent dust and dirt from entering the tank?					
3. Is the overflow on each tank screened?					
4. Are there any unsealed openings in the tank such as access doors, water level indicators hatches, etc.?					
5. Is the roof/cover of the tank sealed and free of any leaks.					
6. Is the tank above ground or buried.					
a. If buried or partially buried, are there provisions to direct surface water away from the site.					

STORAGE	TANK (name)	TANK (name)	TANK (name)	TANK (name)	COMMENTS
b. Has the interior of the tank been inspected to identify any sanitary defects, such as root intrusion?					
8. Does the tank "float" on the distribution system or are there separate inlet and outlet lines?					
9. What is the **measured** chlorine residual (total/free) of the water exiting the storage tank **today**?					
10. What is the volume of the storage tank in gallons?					
11. Is the tank baffled?					
12. Prior to the TC+ or EC+, what was the previous date item #1-6 were checked and documented?					

DISTRIBUTION SYSTEM	SYSTEM RESPONSES
1. What is the minimum pressure you are maintaining in the distribution system?	
2. Did pressure in the distribution system drop to less than 5 psi prior to experiencing the TCR positive finding.	
3. Has the distribution system been worked on within the last week? (service taps, hydrant flushing, main breaks, main extensions, etc.) If yes, provide details.	
4. Are there any signs of excavations near your distribution system not under the direct control of your maintenance staff?	
5. Did you inspect your distribution system to check for mainline leaks? Do you or did you have a mainline leak?	
6. If there was a mainline leak, when was it repaired?	
7. On what date was the distribution system last flushed?	
8. Is there a written flushing procedure you can provide for our review?	
9 Do you have an active cross connection control program?	
10. What is name and phone number of your Cross-Connection Control Program Coordinator?	

DISTRIBUTION SYSTEM	SYSTEM RESPONSES
11. Is the review and testing of backflow prevention devices current?	
12. On what date was the last physical survey of the system done to identify cross-connections?	

BOOSTER STATION	SYSTEM RESPONSES
1. Do you have a booster pump? How many?	
2. Do you have a standby booster pump if the main pump fails?	
3. Prior to bacteriological quality problems, did your booster pump fail?	
4. Do you notice standing water, leakage at the booster station?	

SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings)	Routine Site TC+ or EC+	Upstream Site	Downstream Site	Sample 4 (specify)
1. What is the height of the sample tap above grade? (inches)				
2. Is the sample tap located in an **ext**erior location or is it protected by an **enc**losure?				
3. Is the sample tap threaded, have a swing arm (kitchen sink) or aerator (sinks)?				
4. Is the sample tap in good condition, free of leaks around the stem or packing?				
5. Can the sample tap be adjusted to the point where a good laminar flow can be achieved without excessive splash?				
6. Is the sample tap and area around the sample tap clean and dry (free of animal droppings. other contaminants or spray irrigation systems)				
7 Is the area around the sample tap free of excessive vegetation or other impediments to sample collection				
8. Describe how the tap was treated in preparation for sample				

SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings)	Routine Site TC+ or EC+	Upstream Site	Downstream Site	Sample 4 (specify)
collection (ran water, swabbed with disinfectant, flamed, etc.)				
9. Is this sample tap designated on the sampling plan submitted with this information request?				
10. What were the weather conditions at the time of the positive sample (rainy, windy, sunny),				

GENERAL OPERATIONS;	SYSTEM RESPONSES
1. Where there any power outages that affected water system facilities during the 30 days prior to the TC+ or EC + findings?	
2. Where there any main breaks, water outages, or low pressure reported in the service area where TC+ or EC+ samples were located.	
3. Does the system have backup power or elevated storage?	
4. Did it rain between last date of coliform free sample(s) and date of current TC+/EC+ samples?	
5. During or soon after bacteriological quality problems, did you receive any complaints of any customers' illness suspected of being waterborne? How many?	
6. What were the symptoms of illness if you received complaints about customers being sick?	

MONITORING ANALYSIS	SYSTEM RESPONSES
1. List the coliform monitoring results in the chart below?	
2. Does the data point to where the contamination is coming from? Is	

contamination spread throughout system, appear in well(s), appear only after storage tank(s), isolated to a pressure zone, appear only at one tap	
3. Has the system considered enumerating samples to help look for contamination hotspot?	
4. Is contamination reoccurring?	

Sample Date	Sample Location	Result	Chlorine Present	Comments

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http://www.mtyhd.org/

ADDITIONAL INFORMATION TO BE SUBMITTED WITH RESPONSES TO THE ABOVE QUESTIONS

1. **Sketch** of System showing all sources, treatment locations, storage tanks, microbiological sampling sites and general layout of the distribution system including the location of all hazardous connections such as the wastewater treatment facility.
2. A set of photographs of the well, pressure tanks, and storage tanks in the system may be submitted if they would show that the contamination is directly related and changes have been made since the last inspection by our Department
3. Name, certification level and certificate number of the Operator in Responsible Charge.
4. Copy of the last cross connection survey performed that identifies the location of all unprotected cross connections.

SUMMARY: BASED ON THE RESULTS OF YOUR INVESTIGATION AND ANY OTHER INFORMATION AT YOUR DISPOSAL, WHAT DO YOU BELIEVE TO BE THE CAUSE OF THE POSITIVE TOTAL COLIFORM SAMPLES FROM YOUR PUBLIC WATER SYSTEM?

CERTIFICATION: I CERTIFY THAT THE INFORMATION SUBMITTED IN RESPONSE TO THE QUESTIONS ABOVE IS ACCURATE TO THE BEST OF MY PROFESSIONAL KNOWLEDGE

NAME:_____ **TITLE:**_____ **DATE:** _____